

Abstract

There is provided a magnetic tape comprising a non-magnetic support, and a primer layer and a magnetic layer both formed on a surface of the non-magnetic support, and a backcoat layer formed on the other surface of the non-magnetic support, wherein the magnetic layer contains magnetic powder which comprises needle-like iron-based magnetic particles, and has a thickness of 0.09 μm or less; and the primer layer contains non-magnetic powder which comprises plate-like non-magnetic oxide particles with an average particle size of 10 to 100 nm. Further, the thermal expansion coefficient of the magnetic layer in the tape widthwise direction is $(0 \text{ to } 8) \times 10^{-6}/^{\circ}\text{C}$, and the humidity expansion coefficient of the magnetic layer in the tape widthwise direction is $(0 \text{ to } 10) \times 10^{-6}/\% \text{RH}$; and the amount of edge weave which is formed on either of the edges of the tape serving as the side of reference for the feeding of the tape is 0.8 μm or less. This magnetic tape is excellent in performance for recording/reproducing signals with short wavelengths and hardly causes a decrease in reproducing output due to off-track.